September 9, 2003

Mr. Ken May, General Manager
Canyon Fuel Company, LLC
397 South 800 West
Salina, Utah 84654

Dear Mr. May:

Re: Approval of Abandoned Mining Equipment-2LPE, Canyon Fuel Company, LLC, SUFCO Mine, C/041/0002, Task ID #1653, Outgoing File

The amendment to the SUFCO Mine mining and reclamation plan, which proposed to abandon a longwall face conveyor tail gate drive and the fifty-two pan line sections in the gate road areas designated as 1 Left Pines East and 2 Left Pines East, is approved. Clean copies of the revisions to the various areas of Chapter 7, Hydrology of Volume 2 of the SUFCO Mine mining and reclamation plan were received as part of the initial submittal on August 19, 2003. Enclosed is a stamped incorporated copy for insertion into your Mining and Reclamation Plan.

Those federal agencies that received the amendment during the review process can simply incorporate it into their existing copy of the Mining and Reclamation Plan.

Please be advised that **upon completion of the storage/abandonment of the pan line sections and tailgate drive, the permittee must provide an "as-built" FIGURE 7-7, which is certified by a Utah registered professional engineer for Division records.** This "as-built" information will become part of the mining and reclamation plan record.

The Manti LaSal National Forest has concurred with the decision of this TA in an email to DOGM dated September 5, 2003.

If you have any questions, please call Peter Hess at (435) 613-5622, or me at (801) 538-5325.

Sincerely,

/S/

Daron Haddock
Permit Supervisor

an
cc: Mike Davis
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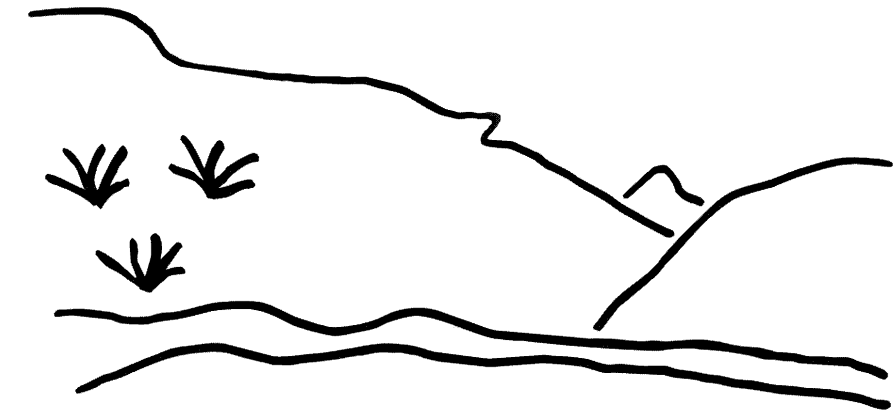
State of Utah



Utah Oil Gas and Mining

Coal Regulatory Program

SUFCO Mine
Abandonment of Equipment Underground
C/041/0002, Task ID #1653
Technical Analysis
September 9, 2003

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TECHNICAL ANALYSIS

The Division ensures compliance the Surface Mining Control and Reclamation Act of 1977(SMCRA). When mines submit a Permit Application Package or an amendment to their Mining and Reclamation Plan, the Division reviews the proposal for conformance to the R645-Coal Mining Rules. This Technical Analysis is such a review. Regardless of these analyses, the permittee must comply with the minimum regulatory requirements as established by SMCRA.

Readers of this document must be aware that the regulatory requirements are included by reference. A complete and current copy of these regulations and a copy of the Technical Analysis and Findings Review Guide can be found at http://ogm.utah.gov/coal

This Technical Analysis (TA) is written as part of the permit review process. It documents the Findings that the Division has made to date regarding the application for a permit and is the basis for permitting decisions with regard to the application. The TA is broken down into logical section headings which comprise the necessary components of an application. Each section is analyzed and specific findings are then provided which indicate whether or not the application is in compliance with the requirements.

Often the first technical review of an application finds that the application contains some deficiencies. The deficiencies are discussed in the body of the TA and are identified by a regulatory reference which describes the minimum requirements. In this Technical Analysis we have summarized the deficiencies at the beginning of the document to aid in responding to them. Once all of the deficiencies have been adequately addressed, the TA will be considered final for the permitting action.

It may be that not every topic or regulatory requirement is discussed in this version of the TA. Generally only those sections are analyzed that pertain to a particular permitting action. TA's may have been completed previously and the revised information has not altered the original findings. Those sections that are not discussed in this document are generally considered to be in compliance.

INTRODUCTION

The proposed changes to SUFCO Mine mining and reclamation plan were received on August 14, 2003. The amendment proposes to abandon the 2LPE longwall mining conveyer tail drive and 52 panline sections in the 1LPE and 2LPE gate roads. The equipment will be stripped of the associated gear reducer(s) thus removing all lubricants. The electrical motors will also be removed from the conveyor drive such that only steel will be left behind. The panline sections only consist of steel.

Overlying surface lands are owned by the Federal government and managed by the Manti-LaSal National Forest. The Forest Service has concurred with the decision of this TA in an email to DOGM dated September 5, 2003.

OPERATION PLAN

SPOIL AND WASTE MATERIALS

Regulatory Reference: 30 CFR Sec. 701.5, 784.19, 784.25, 817.71, 817.72, 817.73, 817.74, 817.81, 817.83, 817.84, 817.87, 817.89; R645-100-200, -301-210, -301-211, -301-212, -301-412, -301-512, -301-513, -301-514, -301-521, -301-526, -301-528, -301-535, -301-536, -301-542, -301-553, -301-745, -301-746, -301-747.

Analysis:

Disposal of Noncoal Waste

The conveyer tail drive is equipped with a drive motor, gearbox, and lines that contain lubricating and hydraulic oils. The oils will be drained and the drive motor, gearbox, and lines will be removed from the tail drive prior to abandonment. The longwall panline consists of 52 sections constructed of 100 percent steel material and contains no greases, lubricants, flammable liquids, or other combustible materials. Therefore, all abandoned equipment will be comprised only of steel.

The final disposal is in the 1LPE and 2LPE gate roads, which are within the permit area. There will be no combustible materials, or wind-borne waste associated with leaving mining equipment underground.

Because the tail drive will be drained and stripped and all remaining equipment is constructed of steel, there will be no hazardous waste being left underground. The RCRA regulation does not apply. The permittee has stated on page 7-38E, "Periodically due to difficult recovery conditions or roof collapse, mining equipment is abandoned underground. Abandoned mining equipment locations are shown on Figure 7-7. Prior to leaving equipment underground, lubricating and hydraulic fluids are removed to the extent possible."

Findings:

The information provided in the proposed amendment is considered adequate to meet the requirements of this section.

HYDROLOGIC INFORMATION

Regulatory Reference: R645-300-730

Analysis:

UDOGM prepared a Cumulative Hydrologic Impact Assessment (CHIA) for the SUFCO Mine, which includes Quitchupah and Muddy Creeks, in 2000. Abandonment of equipment underground was not covered in this CHIA. Prior to this amendment, consequences from abandoned mining machinery and fluids were not included in the Probable Hydrologic Consequences (PHC) determination in the SUFCO Mine MRP. The PHC has been revised for this amendment to describe the potential for any hydrologic impacts as a result of equipment abandonment.

The proposed amendment states on page 7-38E that the equipment is steel and therefore not too different from the steel used as roof support throughout the mine. A considerable tonnage of ferrous materials, such as steel roof bolts, wire mesh, and "cans" used for roof support, are routinely abandoned in underground coal mines. This is because the materials cannot be removed without endangering the lives of miners. According to the cover letter submitted with the amendment, the conveyor tail drive and panline sections comprise a total of approximately 555 tons of steel. This additional steel is not considered significant considering the amount routinely abandoned during underground mining operations during the life of a mine. Furthermore, longwall mining, as at SUFCO, uses steel at a considerably lower rate when compared with room-and-pillar mining. At the Genwal Crandall Canyon Mine, room-and-pillar mining requires approximately 400 tons of steel be placed and abandoned underground to produce each million tons of coal.

The abandoned equipment will contain no lubricating fluids or hazardous materials.

Water encountered in the mine from the Blackhawk formation has little communication with the surface and is not subject to annual recharge events. UDOGM cannot determine whether or not it is likely that the areas where the pans are to be abandoned will be flooded.

Conditions in the abandoned areas of the mine are not conducive to oxidation or other chemical reactions:

- Recorded pH values for ground waters at the SUFCO Mine are typically neutral to slightly alkaline;

- Oxygen would be absent or at low concentration both in the air and waters of the abandoned mine. Other oxidizing agents would not typically be found in an abandoned mine.

- The cool temperatures in the abandoned mine would tend to retard rather than accelerate most chemical reactions;

Assuming the mine were to flood and the abandoned equipment were to be covered with water, several probable results and impacts can be evaluated:

- Flooding of the abandoned mine might be relatively rapid, but once flooded, flow of ground water into, through, and out-of the void spaces of the mine should be slow;

- If the steel were to oxidize, it would be at a very slow rate and the amount of iron and other metals added to the ground water at any one time would be very small;

- Oxides of most metals are insoluble or slightly soluble in water (anions in solution in the water could increase solubility, but this is not anticipated based on typical ground-water chemistries of the region), especially at temperatures expected in the mine, so once formed, metal oxides would tend to precipitate as solids within the mine rather than flow in solution in the ground water. If any metal were to go into solution, concentrations would be highest near the pans, but the volume of water in the flooded mine would dilute concentrations outside the immediate vicinity of the conveyor pans;

- Because of dilution and dispersion, natural seasonal fluctuations, and the limits of accuracy of analytical methods, changes in water quality would not be expected to be large enough to be detected at the surface at springs, groundwater baseflow to streams, or in discharges from the mine.

If the abandoned equipment is not covered with water as the mine floods, the metals might oxidize at a faster rate. Even though possibly occurring over a shorter time period, the probable impacts would be negligible to nonexistent because there would be no water to convey the metal oxides to ground or surface waters.

Finding:

Abandoning the conveyor tail drive and panline will cause minimal, if any, disturbance to the hydrologic balance within the permit and adjacent areas and is not expected to cause material damage outside the permit area, and therefore can be considered to have met minimum regulatory requirements.

MAPS, PLANS, AND CROSS SECTIONS OF MINING OPERATIONS

Regulatory Reference: 30 CFR Sec. 784.23; R645-301-512, -301-521, -301-542, -301-632, -301-731, -302-323.

Analysis:

Mine Workings Maps

The permittee has requested to abandon the 2LPE longwall mining conveyor tail drive and panline underground in the 1LPE and 2LPE gate roads. The permittee has shown the location of the prposed abandonment areas for this equipment on Figure 7-7, Abandoned Mining Equipment Locations. **Upon completion of the storage/abandonment of the pan line sections and tailgate drive, the permittee must provide an "as-built" FIGURE 7-7, which is certified by a Utah registered professional engineer for Division records.** This "as-built" information will become part of the mining and reclamation plan record.

Findings:

The information provided in the proposed amendment is considered adequate to meet the requirements of this section.

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